DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-010277 Address: 333 Burma Road **Date Inspected:** 22-Oct-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Location: Shanghai, China

CWI Name: CWI Present: Yes Wang Chuan Qing. No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: Tower Components**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Amit K. Juvekar, was present during the times noted above for observations relative to the work being performed.

This QA Inspector observed the following work in progress:

Bay 10, South tower, Lift 4, Stiffener to Diaphragm.

FCAW welding of weld joint SSTL4-1J/L-101; located on Bay 10, South tower, Lift 4. Welders are identified as 037907; ZPMC Quality Control Inspector (QC) is identified as Wang Chuan Qing. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-4332-TC-P4-F.

Bay 11, East Tower, Lift 4, B/C Corner.

During random visual inspection at East Tower, Lift 4(Temporary Attachment Area near Corner Seam B/C) this Caltrans Quality Assurance (QA) Inspector observed "Crack Like" indications at the removed Temporary attachment Weld area. The indications were shown to ZPMC and ABF QC Inspectors. No Incident Report has been written on this issue. The attached photographs provide additional detail. This QA Inspector carried out NDE on following

Bay 10, West Tower, Lift 3, Corner seams.

This QA inspector performs Random Visual Testing (VT), Magnetic Particle Testing (MT) of approximately 15% area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an

WELDING INSPECTION REPORT

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MT report (TL-6028) for this date. The members are identified as

- 1) WSTL3-4B/K-81B. A/E corner, Excluding Double Diaphragm area. GREEN TAG # 10455.
- 2) WSTL3-4B/K-84B. B/C corner, 1330mm Length from the Top, & Rotation ring areas. GREEN TAG # 10434

Bay 11, South Tower, Lift 4.

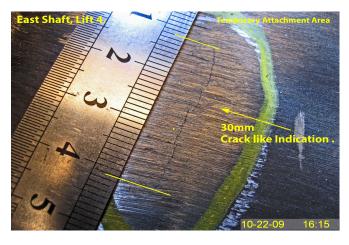
This QA inspector performs Random Ultrasonic Testing (UT) of approximately 10% area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report (TL-6027) for this date. The members are identified as

- 1) SSTL4-1G/L-136A/B. 127M Diaphragm.
- 2) SSTL4-1F/L-137A/B. 123M Diaphragm.

Bay 11, East Tower, Lift 4, B/C Corner Seam(Work Piece area).

This QA inspector performs Random Visual Testing (VT), Magnetic Particle Testing (MT) of approximately 15% area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT & UT report (TL-6028) for this date. The members are identified as ESTL-2B/L-58.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 13482570045, who represents the Office of Structural Materials for your project.

Inspected By:	Juvekar,Amit	Quality Assurance Inspector
Reviewed By:	Clifford, William	QA Reviewer